



NEWSLETTER OF THE LONDON CHAPTER,
ONTARIO ARCHAEOLOGICAL SOCIETY



November, 1985

85-8

The Archaeobotany of Southern Ontario for the Last 100 Years, Almost.....

A revitalized Rodolphe Fecteau has agreed to present this month's talk. Rudy plans to provide members with an historical update of his discipline, plus the opportunity of actually seeing his subject material. A variety of carbonized seed and wood specimens will be available for microscopic viewing by Chapter members following his presentation.

Bring a friend and meet us in the Museum of Indian Archaeology on Thursday, November 14 at 8:00 P.M. Let's have another full house!

Chapter Executive

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EXECUTIVE REPORT

Congratulations.....as advertised, this year's Annual O.A.S. Symposium was an unqualified success! During the proceedings, there were numerous compliments from Canadian and U.S. participants and subsequently, rumours of its success were circulating at the Eastern States Archaeological Federation meetings in Buffalo. Our London Chapter and executive have much reason to be proud.

As the receipts and invoices begin to settle, it appears that the symposium was not only an academic and entertainment coup, but also a financial success. The resulting profit should put chapter finances firmly in the black.

Such matters were of prime concern to our executive at their latest meeting; however, other topics on the agenda included member response to the KEWA questionnaire, future speakers and the Chapter Christmas party. A decision is expected shortly concerning the 1986 Chapter membership fee structure.

SOCIAL REPORT

One of the most enjoyable functions at our recent symposium was the presentation of a much deserved J. Norman Emerson medal to Dr. Howard Savage. This sterling silver medal was designed for the 1979 Society executive by Mr. T. Kenyon of Hamilton, and represents the highest award which can be bestowed by the O.A.S. for scholarly excellence. It is only the second such medal awarded to date by the Society.

For those members who were unable to attend the banquet presentation, the following biographical sketch has been excerpted from the program:

HOWARD G. SAVAGE, M.D., C.R.C.P.

Howard Savage was born in Sheridan (Oakville) in 1913. He lived in the family homestead until he received his M.D. in 1937. He interned at Toronto General Hospital, the Hospital for Sick Children and at Childrens' Hospital in Dallas, Texas.

Howard served in the R.C.A.F. as a Medical Officer from 1942 to 1945. On his return to civilian life he was awarded a Certificate in Paediatrics from the Royal College of Physicians of Canada. He practised in north Toronto from 1946 to 1958.

Throughout the 1960's, Howard's interest in osteology broadened to include more than just Homo sapiens. Encouraged by the late Jim Baillie of the Department of Ornithology of the Royal Ontario Museum, he assisted the Museum in expanding its collections of ornithological specimens.

The late Drs. Wilfrid Auger and J. Norman Emerson both recognized Howard's expertise in the field of faunal bone analysis and research and began bringing specimens for identification. Howard transferred all his boundless energy and enthusiasm to zoo-archaeology and particularly osteo-archaeology. He published his first archaeological paper as the result of his involvement with Dr. William Hurley's Palaeo-ecology Project. Many requests for faunal analysis from archaeologists across Canada and the U.S. followed. This led to Howard joining The Ontario Archaeological Society. Howard quickly became a valued and popular member of the Society, and was elected President in 1972, 1973 and 1976. He was elected an Honorary Life Member in 1974.

Howard gave his first osteo-archaeology course at the University of Toronto in 1973. He infected many of his students with 'bone fever', and many have gone on to make substantial contributions at an international level. In 1979 the University designated Howard's laboratory and course room The Howard Savage Faunal Osteo-Archaeology Collection.

In addition to his University work, Howard has been Chairman of Medical Archaeology and Anthropology of the Academy of Medicine since 1976. As well, since 1975, he has held the office of Secretary of the Brodie Club, a long-established natural history group.

Currently, Howard is Adjunct Professor of Anthropology at the University of Toronto, and an esteemed past-President of the Ontario Archaeological Society. He maintains a lively interest in field work and may be found digging for bones on Ontario archaeological sites during the season, often along side his present and former students.

CHAPTER CHRISTMAS PARTY

Preparations are already underway for the annual Chapter Christmas Party and preferred dates will be discussed at our upcoming meeting. A number of facilities are available for the gathering; however, our executive is still open to offers. Those members who are prepared to host our party are encouraged to contact an executive member by telephone or at the monthly meeting next Thursday.

As a result of the overwhelmingly positive response concerning KEWA's research report content, the following two articles are presented for your consideration. The first was presented by Dr. William Finlayson at our symposium.

THE 1985 SALVAGE EXCAVATIONS AT THE KEFFER SITE: A FIELD REPORT

William D. Finlayson
David G. Smith
Michael W. Spence
Peter Timmins

The Keffer site is a fifteenth century, Southern Division Huron village located on a tributary of the Don River, in the town of Vaughan, north of the city of Toronto.

In April 1985, the Museum of Indian Archaeology initiated an excavation designed to salvage 1.54 hectares (3.81 acres) of this site which are scheduled to be destroyed by a proposed housing subdivision. This subdivision is part of an industrial/residential development being undertaken by Magna International Inc., Canada's largest auto parts manufacturer. These excavations are continuing at the present time and will be completed in mid November.

The Keffer project was conceived, initiated and directed by William D. Finlayson. David Smith has served as Project Manager with Peter Timmins as Assistant Manager. James B. Jamieson has supervised operations in the field and Michael Spence has undertaken the excavation of the burials. Impending analysis and report production will

be a team effort by Finlayson, Smith, Spence, Timmins, Jamieson and a number of other specialists.

To date, more than \$337,000 have been raised for the project, including \$37,500 from Magna International, \$27,500 from the Town of Vaughan, \$17,000 from the Province's Ontario Youth Opportunities Program, \$15,000 from the Government of Canada's Summer Canada Works Program, and \$240,000 from Wintario's Community Facilities Improvement Program. In addition, the Museum will contribute approximately \$10,000 in computing funds and a variety of logistical support. It is estimated that the total project cost may ultimately exceed a half million dollars.

The Keffer site has been known for many decades. In 1888, David Boyle of the Canadian Institute investigated an ossuary which was located south of the Keffer site. While Boyle also investigated another Iroquoian village on the same field trip, Timmins (1984) has noted that he did not visit the Keffer site at this time.

In 1925, A.J. Clark, a meticulous avocational archaeologist, worked on the site and produced a very detailed sketch map which delimited its location and approximate size. His map, associated notes and a small collection of artifacts now reside in the Archaeological Survey of Canada, National Museum of Man.

The Keffer site was registered with the Ministry of Culture and Recreation (now Citizenship and Culture) by Victor Konrad (1973) during his archaeological surveys of the Metropolitan Toronto Planning Area in the early 1970's. Konrad estimated that the site was 6 to 10 acres in size and had been partially disturbed. He suggested that the site was an extremely important cultural resource which had a high but not extreme probability of being destroyed by urban expansion. Konrad's recommendation was that the site be preserved.

Despite A.J. Clark's detailed map, the Keffer site was given an incorrect Military Grid Reference in the files of the Archaeology Unit, Heritage Planning Branch in Toronto and only a general lot and concession location was available when the present investigations were initiated.

In 1984, the Museum of Indian Archaeology was awarded a contract to relocate the site, to assess its significance as a heritage resource and to determine its size. Field work conducted by Peter Timmins in May and June revealed that approximately 1.4 to 1.6 hectares of the site were threatened with destruction by the client's proposed development plans.

In the fall of 1984, Finlayson returned to the site to more accurately determine its size. Seven test trenches were excavated, the plough zone being removed by power equipment (Figure 1). Selected portions of these trenches were shovel-shined and two rows of palisades were discovered in six of the trenches (Finlayson 1985a). This allowed the writers to determine that 1.56 hectares could not be developed as a subdivision without salvage excavation.

In March 1985, the Museum was awarded the contract to salvage the site and field work was initiated on May 6. Crew size varied during the summer but averaged 12 to 20, with a maximum of 28. At present, the project employs 15 full-time crew members and 6 part-time archaeology students.

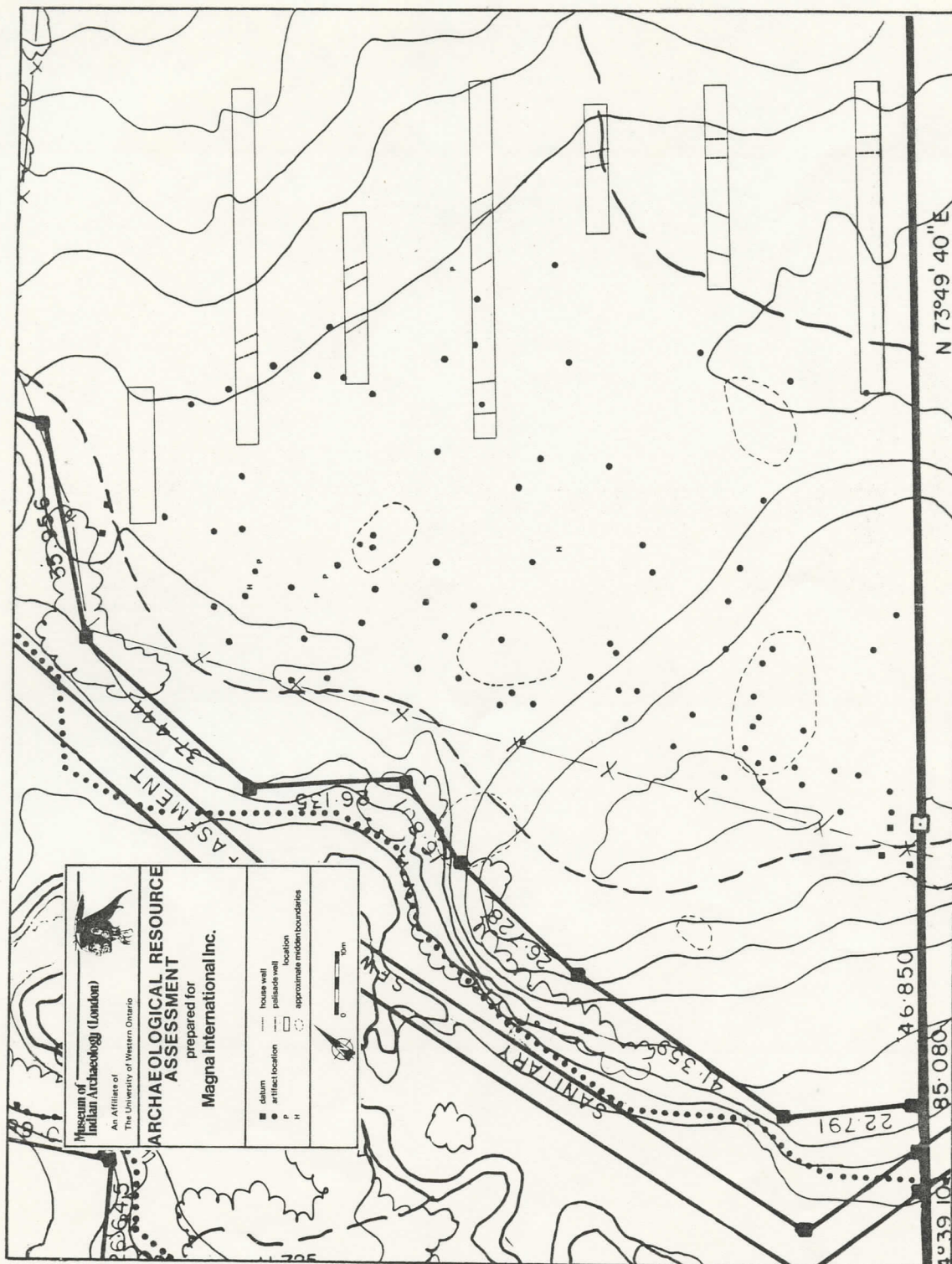


Figure 1: Keffer Site (AkGv-14) Investigations 1984

Objectives

The specific objective of the 1985 excavations at the Keffer site was the salvage excavation of that portion of the site which was to be destroyed.

This involved shovel excavation and screening of all midden deposits, followed by removal of the remainder of the plough zone using power equipment with no examination of the soil for artifacts. It was anticipated that this strategy would provide an adequate sample from each midden while allowing the recovery of data on the settlement pattern of the village and the excavation of subsurface features.

In addition, flotation samples were collected and processed to allow a study of the floral resources used by the occupants of the site. Beyond this, there was an implicit objective to undertake as much research as possible with the funding that was available, or that could be obtained.

During initial discussions with the client, the possibility of opening the site for public visitation was discussed. However, the client concurred that since the objective of the project was to salvage the site in the most cost effective manner, any public participation would detract from this objective.

Strategy and Methods

In approaching the excavations, we decided that the middens in the ploughed fields would be excavated first. The locations of these middens were determined by controlled surface collection. They were excavated in one meter squares with the plough zone being removed in 10 cm levels. Undisturbed basal deposits varying from 10 to 40 cm in depth were encountered under most ploughed middens. All deposits were screened using 1/4" mesh.

Undisturbed middens were also excavated and screened in 1 meter squares. Arbitrary 10 cm levels were used unless the deposits were such that excavation by natural strata was more appropriate.

Once the disturbed middens had been excavated, the plough zone was removed using power equipment. In most instances this involved the use of a "Grade-All" which removed the topsoil and deposited it in a dump truck which hauled it off site. The "Grade-All" allowed the exposure of the subsoil surface with no marks left by the tracks of a bulldozer or tires of a road grader. Large areas were exposed at one time and were kept wet, if necessary, with water provided by a fire fighting pump.

Since the site was located on two separate elevations, independent 5 meter grid systems were established for the upper and lower portions of the village. All post moulds and feature locations were recorded by triangulation. Large post moulds and features were sectioned to determine depth and profile shape. All descriptive data were recorded on standardized forms in the field.

Artifact and Data Processing

Until October 5, all artifacts were washed and catalogued in a field laboratory established in one of the houses owned by the client near the site. Catalogue data were originally recorded on a custom designed form and were then entered into an IBM Portable

Personal Computer in the field lab. Initial listings of the data were produced and all proof-reading and editing were done on a regular basis. An initial summary statistics listing of the catalogue data in mid September indicated that 85,709 artifacts had been recovered, including 3128 rim sherds.

After settlement pattern data were recorded in the field, the forms for each 5 meter square were checked for completeness. They were then shipped by courier to the Museum in London where the data were entered into an IBM PC-XT. Three computer files containing, respectively, summary data, post mould data and feature data were created for each square. After entry, the data were transferred to the University's Digital PDP-10 time sharing computer and were processed using the settlement pattern system developed by the Museum. Initially four separate "quick" plots were generated by a line printer. In addition to producing various plots of data, these listed all data to allow proof-reading and editing. The data for each square were then sent back to the field laboratory where the data were field checked to ensure accuracy and to allow for any missing data to be collected. At this point the features and large post moulds were sectioned and final descriptive data added to the forms. The final entry and editing of data were completed using the portable micro computer in the field lab.

Using this system, it was possible to generate composite plots of settlement pattern data during the field season and to check for missing data before the end of the dig. Thus the data are much more complete and more accurate than was previously possible. It also means that the settlement pattern data are available for final plotting on the Calcomp plotter and for statistical analysis much sooner than if this processing was left until the field season was over.

Results to Date

Obviously any presentation of the results to date must be preliminary since the excavations are still on-going. However, the following can be noted.

The Keffer site is in an unusual location for a Huron village. There are two parts to the village. One is on a plateau overlooking a tributary of the Don River, while the other is in a depression 2 to 3 meters below the first, and its eastern boundary is at the base of a slope which rises to the east. Thus the eastern periphery of the site is not well located for defensive purposes. This separation of the village into two parts by topographic features has resulted in delineating an Upper and Lower Village.

A cursory examination of the artifacts and data recovered from the site suggest that it is a Southern Division Huron village probably occupied in the first half of the fifteenth century.

To date, 15 middens have been discovered. Three of these were hillside middens which were relatively undisturbed. More than 650 one meter squares have been excavated in or directly adjacent to middens (Figure 2).

Two hypotheses can be presented to explain the rebuilding. First, it is possible that the village contracted, and that a group of people left the Keffer village to live elsewhere. That this happened is suggested by the discovery of the wall post moulds of House 6 under a pit inside House 7. If this was the case, the village was originally surrounded by two rows of palisade and the Lower Village was planned to utilize houses in the defensive strategy of the village. Central plazas were created as well as narrow corridors between adjacent houses. Interestingly, the largest plaza does not appear to

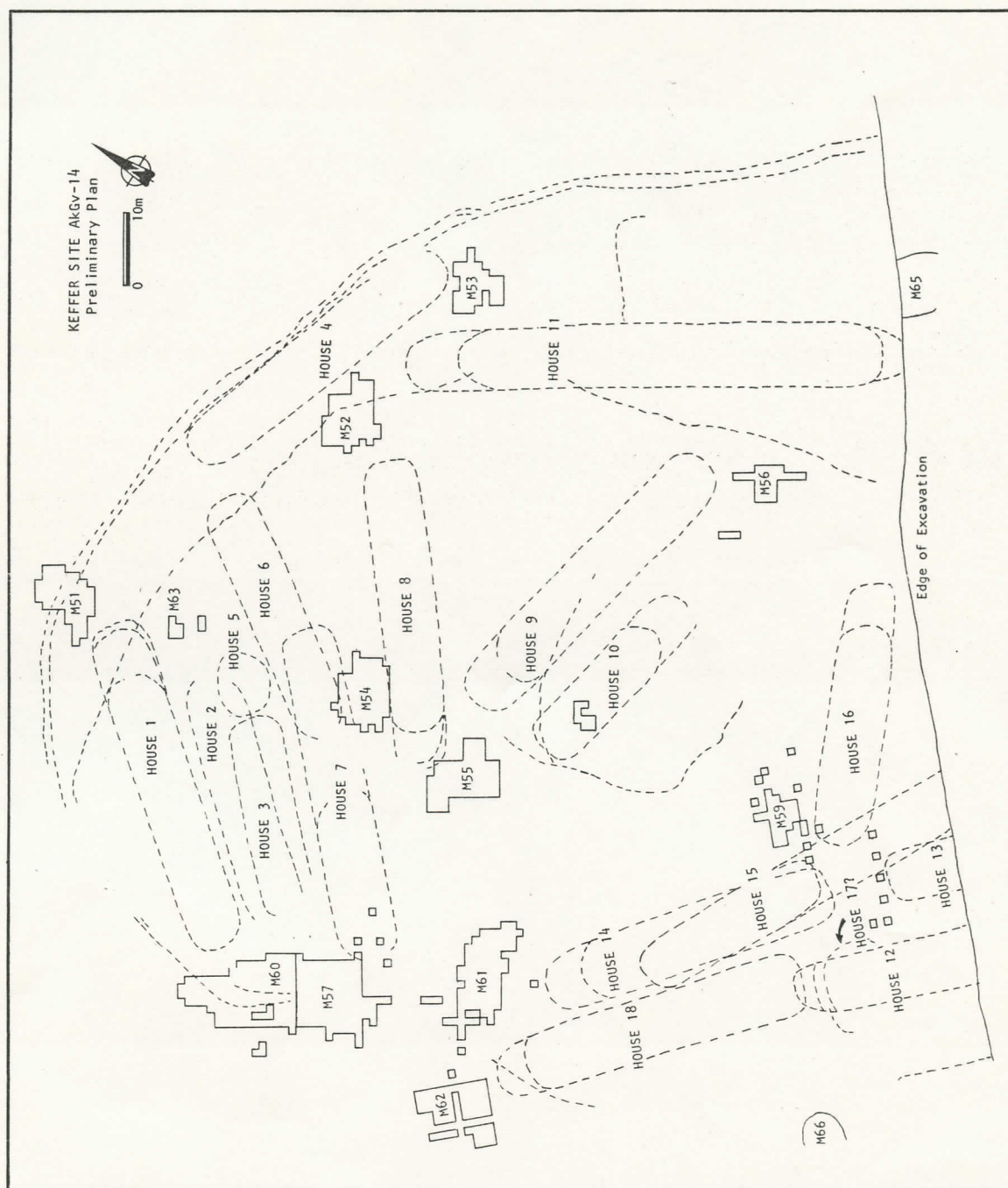


Figure 2: Preliminary Plan of the Keffer Site (AkGv-14) - as of September 30, 1985

have been the location of a large communal midden as was the case at Draper (Finlayson 1985b).

A contraction of the village would have involved the dismantling of three houses (4, 6, 11) and the shortening of House 1. The village after contraction was surrounded by only a single row of palisade and there was less use of houses in the defence of the village.

A second hypothesis is that the village expanded. In this case, there were initially six houses in the Lower Village. It was originally surrounded by a single row of palisade and there appears to have been little concern to utilize the houses to assist in village defences. The only exception is the abutment of the eastern corner of House 1 with the palisade.

The expansion of the Lower Village involved rebuilding of the palisade up to 20 meters outside its original location. The rebuilt palisade consisted of two rows of posts.

The rebuilding may also have involved the replacement of House 3 with House 2, the shortening of House 7, the construction of House 4 parallel and directly adjacent to the new palisades, and the extension of at least 4 houses. These modifications to the houses resulted in their contributing to the defences of the village. The distance between houses was reduced, producing a situation which may have been more easily defended against attacking war parties that had breached the palisades. In addition at least 2 plazas were created.

The house structures at the Keffer site are generally similar to those at the Draper site and other prehistoric Huron villages. However, there are some interesting differences. These include a lower density of pits especially when the densities of wall post moulds and sweat bath post moulds are considered. This would suggest that the Huron at Keffer were not pit diggers and users to the same extent as the Huron at Draper. The mean house length at Keffer is also shorter than at Draper and the very long house structures are not as numerous as at Draper. This may be related to the earlier temporal position of the site.

At the present time there has been little examination of the artifact assemblage recovered. However, a few general observations can be made. There are minor occurrences of both St. Lawrence Iroquoian and Seneca ceramics at the site which are suggestive of some form of contact, perhaps warfare, between the Huron at Keffer and these peoples. The recovery of at least two deer scapula pipes also indicates the possibility of contact with the St. Lawrence Iroquois. A considerable quantity of cut, broken and burned human bone has been recovered from the middens, supporting the suggestion of warfare.

The burials at the Keffer site were generally in rather poor condition, so a great deal of care was required in their excavation. Some elements were removed in blocks, to be excavated from their soil matrix under the more controlled conditions of the laboratory. Observations were made in the field, while the bone was still in situ, when it was feared that the poorly preserved material might not survive excavation.

As of September 30, 12 burials had been found. One was an incomplete adult male bundle burial in a house. All the others were primary burials. Three were adults (two males, one female) buried flexed, in houses. Of the other 8, one was the flexed burial of a child of perhaps 4 or 5 years. The remaining 7 were all under 3 years of age. Most were found in houses, but two came from small pits between the rows of palisade. These

two were the youngest individuals on the site. The size of their bones indicates that they were even younger than the newborn. It is possible that they were not full term, but rather late fetal stillborn. This would explain their unusual location; they had probably not survived to the point at which they would have been assigned a social identity and treated as deceased members of the community. Infanticide is also a possibility.

Five burials were flexed on the left or right side. However, 5 others rested largely on their stomachs. Four of these had their legs flexed while one was loosely sprawled. One of the palisade burials was extended on its back. Orientations were highly variable.

A preliminary analysis of some of the flotation samples from the site, by Charles Turton, revealed that all cultigens (corn, beans, squash, sunflower and tobacco) were present. An examination of some charcoal samples from a single one meter square in one of the undisturbed hillside middens revealed that the vast majority of the charcoal in the lower levels was beech and maple, while that in the upper levels was from a wide variety of trees. This suggests that the occupants of the site settled in a climax beech-maple forest which was cleared and initially used for firewood. During the later occupation, a wider variety of non-climax trees was used for firewood.

Conclusions

The 1985 salvage excavations at the Keffer site are the first major investigation of the prehistoric Iroquoian occupation of the Don River in Southern Ontario. Accordingly, it will provide information that will be most useful in comparing the contemporaneous occupations of the Humber River to the west and the Rouge-Duffins drainages to the east with the Iroquoian occupation of the Don River drainage. In addition, Keffer will provide important data to allow a study of the changes in settlement patterns between the Middle Ontario Iroquois stage, particularly as manifested in the total village data recovered by Jim Wright at the Nodwell site (Wright 1974), and the prehistoric Southern Division Huron Branch of the Late Stage as revealed by Finlayson's investigations at the Draper site.

The 1985 project at Keffer has also allowed the further development of a computerized approach to the processing and analysis of artifacts and data recovered from major investigations at Iroquoian sites. The adoption of micro computers allows significant savings in time, manpower and computing costs in compiling the catalogue and in processing and analyzing artifact and settlement data. These savings have already been utilized in Finlayson's 1985 research program in the Crawford Lake area.

The Keffer project also represents the first time that major funding has been obtained from all levels of government (federal, provincial and municipal) and the private sector. This establishes a very significant precedent for the salvage or rescue of important archaeological resources in the future.

A new approach has been developed for this project. The current target is to complete the basic description, analyses and report production, including publication, by April 30, 1986. Thus, unlike the one year Draper site project which is now in its eleventh year, the Keffer project will essentially be complete within one year and will allow the Museum to initiate a similar project next May 1, should the need arise and the funding be available.

The Keffer project provides for, and reiterates the need for both a professional and popular approach to salvage archaeology. Funding has been obtained to allow significant analyses of the data including floral and faunal material. In addition a sizeable sum has

been set aside to pay for the publication of a professional, externally reviewed, monograph on the project. The Wintario grant from the Province of Ontario also allows the development of a major exhibition of the excavations which will be permanently housed at the Museum. Funds have also been allocated to contract for the writing and publication of a popular book of the project.

Finally, the Keffer site provides additional data which demonstrates the complexity of Iroquoian villages. This stresses the need for large scale excavations especially under salvage or rescue conditions. The "telephone booth" approach common in the past and still being used by some is completely inadequate for excavation of a site such as Keffer.

In conclusion, it can be stated that the Keffer site represents a major contribution to Ontario archaeology and another major step forward in the methods and funding requirements of Iroquoian salvage archaeology.

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Acknowledgements

The salvage excavations on the Keffer site have involved the assistance and cooperation of many individuals. At this time, we would like to acknowledge the assistance of Mr. Allen Tyyska, Mr. Peter Carruthers and especially Ms. Sandra Kain of the Archaeology Unit, Heritage Planning Branch, Ontario Ministry of Citizenship and Culture. Mr. Bill Fox was of great assistance in arranging the permissions necessary to excavate the burials. Mr. Bill Manson of Magna International Inc. has been most cooperative and has assisted us in many ways.

THE COUTURE SITE (AdHI-1): SALVAGING KENT COUNTY PREHISTORY

William A. Fox

During the spring of 1978, the Ministry archaeology office in London was contacted by Archaeological Conservation Program member Mr. Stan Wortner. He mentioned that a new field had been cleared just south of his home and that artifacts indicative of a small prehistoric camp has been exposed through recent tree removal activities (see Figure 1). Consequently, the writer inspected the site in late May and began field work in early June.

Stan and Pearl Wortner had already laid out a unit on the site and had surface collected over a hundred ceramic and lithic artifacts. This material was turned over to the writer for study. The ceramics suggested the presence of both Late and Middle Woodland components.

Field Work

The 1978 field season was very busy for the Ministry, involving numerous major salvage and rescue projects. As a result, work on the Couture camp was sporadic. A total of two and a half days were spent on site between June and September, with crews of between three and six people. Aerial photos were taken during August.



The site is located on a low Berrien sand soil knoll (Anon., 1936), just south of Cornwall Creek and southwest of a marshy wet depression (see Figure 2). Three excavation units totalling 33 square meters were laid out aligned with magnetic north in the area of greatest apparent artifact concentration (see Figure 2).

The bulldozer used to clear trees from the property had churned up the light, sandy topsoil, so that the upper 10 to 15 cm of soil were trowelled and then shovelled and 1/4" screened to recover artifacts. A total of 351 ceramics, 70 lithics and six pieces of calcined bone were obtained from the three units. Subsoil cultural features were disappointingly rare, with only two located in Unit 2 (see Figure 3).

Figure 1: Location of the Couture Site.

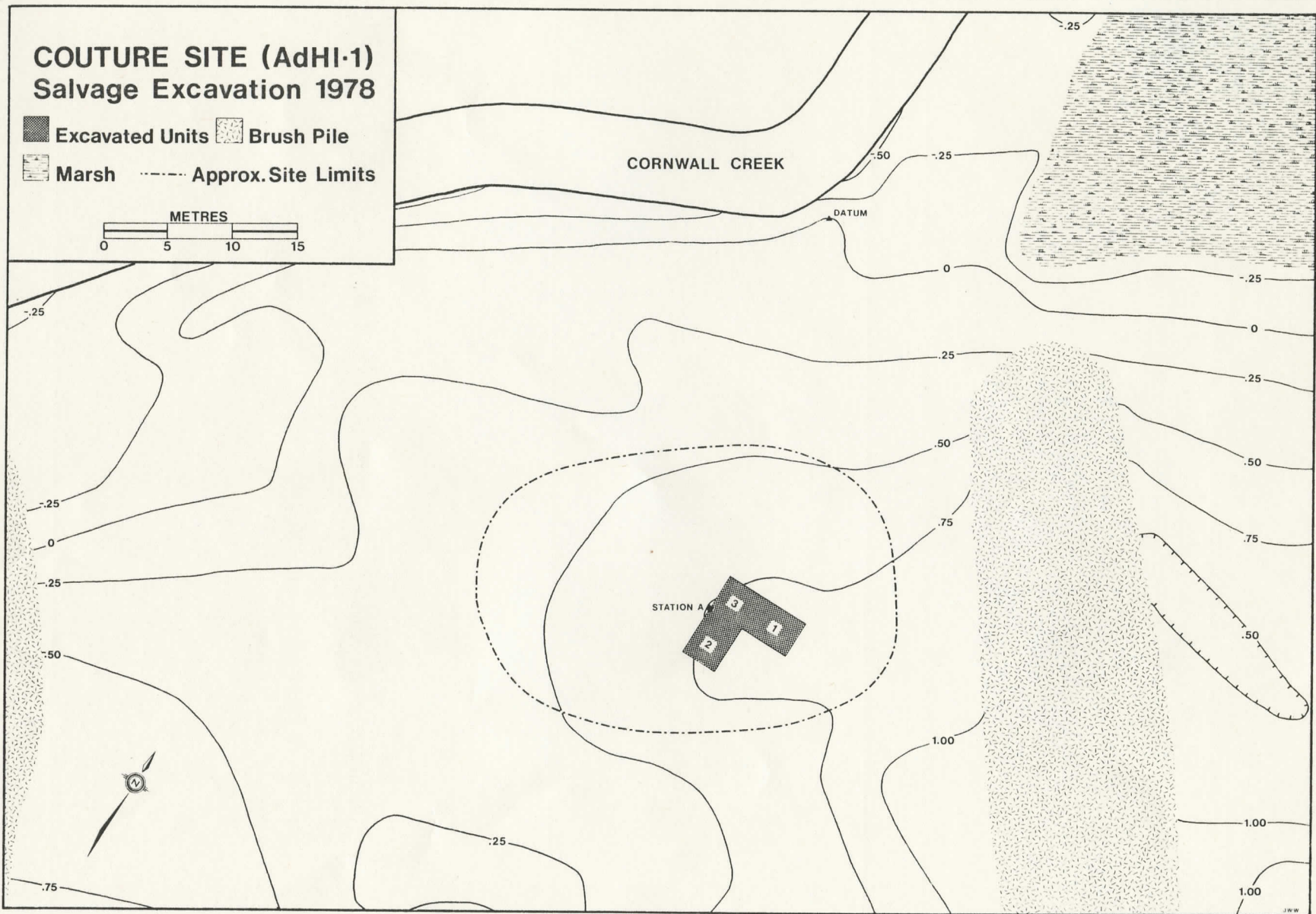


Figure 2.

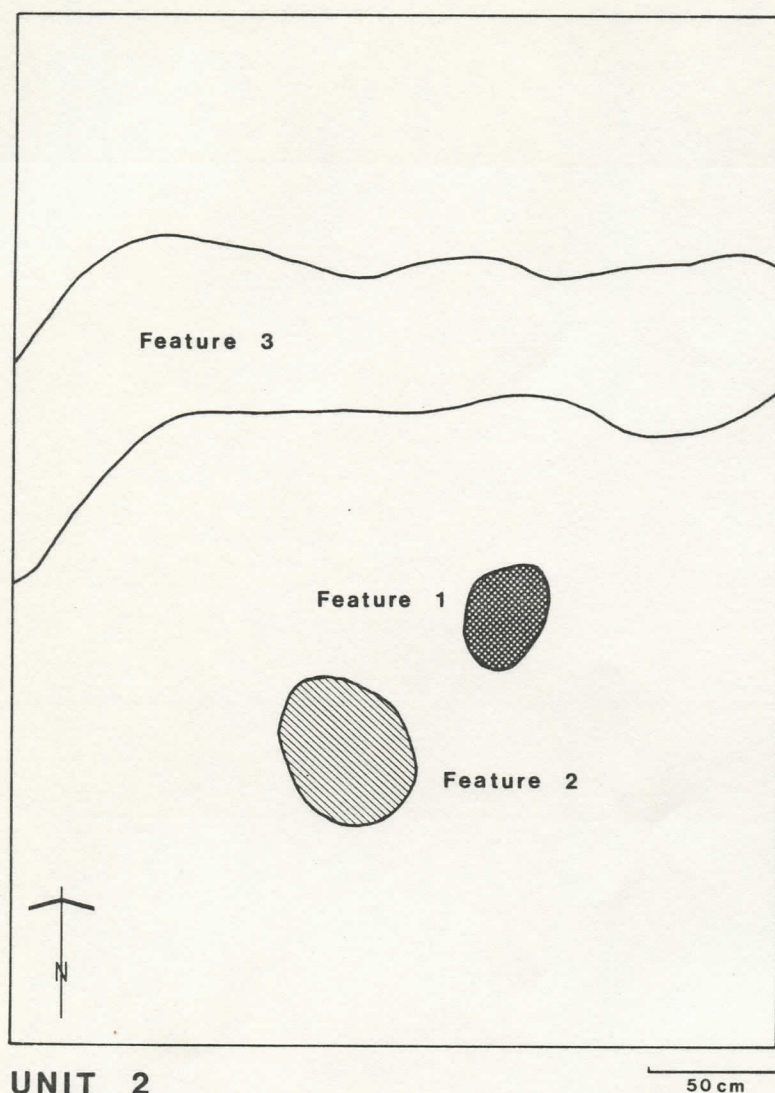


Figure 3: Subsoil Features in Planview.

tapered to a typical conical base. The rim lip was pinched to a pointed profile and then impressed with transverse dentate stamps (see Figure 4:1). Vertical cord impressions on the exterior switch to a sinistral oblique pattern at the shoulder and down onto the body. The interior is plain smoothed, while both the interior and exterior colouration varies from orange to buff. There is a light grey core in some sherds. Tempering consists of coarse igneous rock, up to 8.1 mm in length. Maximum average neck and body sherd thickness are 12.0 (n-10) and 11.1 mm (n-73), respectively. The vessel orifice diameter is approximately 30 cm.

Vessel 2 is represented by a small number of sherds, primarily recovered through excavation of Unit 2. It has an everted rim with a rounded plain lip, 5.5 to 5.9 mm in width. Exterior decoration consists of a single row of sinistral oblique dentate stamps above vertical loosely twisted twine impressions (see Figure 4:2). A shoulder sherd

Feature 1 consisted of an oval pit measuring 44 cm, 30 cm and 8 cm in length, width and depth, respectively. Eight and a half litres of its red-brown and dark grey-brown sand fill was retained for flotation. Feature 2 measured 62 by 49 by 8 cm in length, width and thickness. The burnt orange-pink sand fill indicated that it had been a hearth site. A third lenticular feature to the north produced ceramic and lithic artifacts. Sectioning determined that it was a topsoil filled natural tree fall depression.

Artifacts

Portions of at least two Middle Woodland and three early Late Woodland vessels were recovered from the site surface and unit excavations. Lithic artifacts were sparse, including six chert bifaces and fragments thereof, plus debitage and rough stone which will be described below.

Middle Woodland Ceramics

A considerable portion of Vessel 1 was recovered from the site surface and through excavation of Unit 1. It is characterized by well defined coil breaks, displays a gently outflaring rim and probably

displays vertical rocker dentate stamping and the body exterior appears to be vertical twine impressed, like the neck. Interior decoration consists of a single sinistral oblique row of dentate stamps above a smoothed neck. The exterior colour varies from buff to red-brown, while the interior and core are black. Coarse igneous rock tempering material measures up to 5.3 mm in length. Neck sherd thickness varies from 8.9 to 9.2 mm and the average body sherd thickness is 8.8 mm (n-13). Coil breaks are evident on several sherds.

Early Late Woodland Ceramics

A vast majority of the recovered early Late Woodland ceramics appear to relate to a single vessel. Unit 1 and surface collections again produced most of the analyzable sherds. Vessel 3 displays a coarsely scalloped (multiple castellated) everted rim. The splayed lip varies from 9 to 12.1 mm in width and has oblique to transverse suture tool impressions (see Figure 4:3). Exterior rim decoration consists of two sinistral oblique rows of suture stamps. Oval (7.3 by 5.3 mm) exterior punctates, 8.3 mm deep, spaced 14.1 to 15.5 mm apart (center to center) are superimposed on the lower row of obliques. These create pronounced interior bosses. The neck is decorated with horizontal suture stamp impressions, which may terminate with a row of obliques at the shoulder, above a fabric impressed body. The interior again displays two sinistral oblique rows of suture stamps above bosses. Immediately below these bosses on the smoothed interior surface are a row of fingernail impressions. The suture stamp tool used to produce the impressed motif measured 19 mm by 2.3 mm in length and width. Average body sherd thickness is 7.8 mm (n-29); however, only fifty percent of the sample was analyzable due to splitting. This contrasts with a splitting rate of only 22 percent for the Middle Woodland Vessel 1 body sherds. The tempering material is also quite different, being primarily sand, with a small amount of grit.

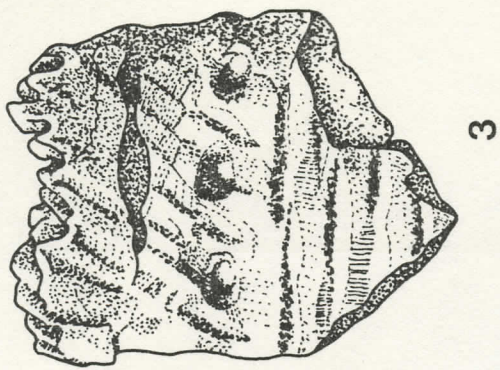
Vessel 4 is represented by a single rim sherd collected from the surface and possibly by some of the fabric impressed body sherds. Its 10.5 mm wide flat lip is decorated with dextral oblique suture stamp impressions, as is the rim exterior and interior. Only one row of obliques is preserved on either surface, as the sherd fractured along the exterior punctate line. The punctates appear to be circular, with a diameter of 6 mm, spaced 15 mm apart. Their depth is unknown, as is the presence of interior bossing. Tempering includes roughly equal amounts of fine grit and sand, while the sherd colour is buff-pink. The lower rim/neck thickness is 8 mm.

The final vessel is represented again by a single small surface collected rim sherd. It displays a castellation similar to Vessel 3, but has cord-wrapped stick impressed decoration. The lip impressions are transverse, while those on the exterior and interior are vertical. Lip thickness is 10.4 mm and the sherd colour is buff.

A final observation with regard to the early Late Woodland ceramics is that one body sherd displays definite interior fabric impression.

Lithics

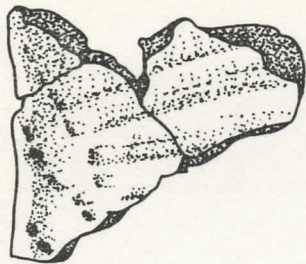
A single notched biface was recovered during the excavation of Unit 1 (see Figure 2). It is side-notched, manufactured of Onondaga chert, and measures 45.3, 21.0 and 6.2 mm in maximum length, width and thickness, respectively (see Figure 4:5). Internotch width is 14.2 mm. The second biface obtained from an excavated context was recovered from Unit 2 and is lanceolate in form (see Figure 4:4). Manufactured from Onondaga chert, it retains a flat pebble cortex facet on its squared base. This biface appears to be



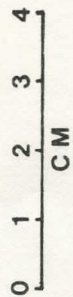
3



6



2



5



1



4

Figure 4: Couture Site Artifacts

a preform, measures 60.7, 33.1 and 9 mm in maximum length, width and thickness, and weighs 17.8 g.

Two complete and two fragmentary bifaces were collected from the site surface. A lanceolate specimen is manufactured of coarse Onondaga chert and is again lanceolate in form (see Figure 4:6). It is relatively thick and narrow and displays a convex base. Maximum length, width and thickness are 47.9, 18.6, and 8.6 mm, while its weight is 4.7 g. The second complete biface is triangular and crudely flaked from Kettle Point chert. This blank measures 40.6 by 22.2 by 7.2 mm in length, width and thickness, and its weight is 5.9 g. A broken Onondaga chert biface blank base weighs 6.0 g, and measures 24.0+, 27.3 and 9.0 mm in length, width and thickness, respectively. Finally, the tip of a refined Selkirk chert biface measures 20.5+ by 18.0+ by 4.0 mm and weighs 1.0 g.

The frequency (n) and weight (g) of debitage by raw material and provenience is presented in Table 1 below. By weight and including bifaces, Onondaga at 221.8 g (82.7%) is by far the most popular chert raw material, followed by Selkirk (33.7 g / 12.5%) and Kettle Point (12.9 g / 4.8%).

Table 1: Couture Site Debitage

		Onon.	Selkirk	Kettle Pt.	Burnt Chert	Slate	Greywacke
Surface	n	55	8	2	9	1	--
	g	174.8	17.3	3.9	5.4	1.4	
Unit 1	n	9	11	2	8	1	--
	g	6.5	8.7	1.2	5.9	4.3	
Unit 2	n	7	2	3	1	--	2
	g	5.1	6.4	1.7	0.6		7.2
Unit 3	n	8	1	1	7	--	--
	g	3.0	0.3	0.2	4.0		

Pebble cortex facets are common on both Onondaga and Selkirk chert debitage, suggesting a local secondary source for most of these cherts. One Onondaga pebble core was recovered. The Kettle Point material may well have been obtained directly or indirectly through exchange from the bedrock source 70 km. to the north. Amongst the debitage assemblage, biface resharpening flakes are relatively common for all chert types, and a small proportion of flakes exhibit evident edge utilization retouch.

The slate flakes probably derive from split cobble choppers or crude knives, while the greywacke flakes may indicate ground stone tool production on this camp. No finished ground stone tools were obtained, but one complete basalt cobble anvilstone and one broken diorite cobble specimen were recovered. The former measures 96.5 by 71.8 by 45.0 mm in maximum length, width and thickness, while the broken anvilstone is 66.8 mm in remaining length and 92.1 by 37.6 mm in width and thickness. Fire-cracked igneous cobble fragments were excavated from Unit 1 (2 pieces) and Unit 2 (3).

Ecofacts

Bone preservation was generally poor, as is typical on well-drained sand knolls. A total of only 13 fragments, 6 of them calcined were recovered. The only species identified was white-tailed deer (C. Dodd, pers. comm.).

Flotation of the Feature 1 fill from Unit 2 produced 27.4 g of carbonized nut shell. Rudy Fecteau (1979) identified these remains as black walnut (26.3 g) acorn (.7 g) and butternut (.4 g).

Discussion

The Couture site is but one of many small prehistoric camps scattered across the knolls of the Bothwell sand plain (Chapman and Putnam 1973). Limited faunal and floral evidence from this multi-component camp cannot be assigned with certainty to either the Middle or Late Woodland occupations, but does suggest that this site functioned as a typical fall deer hunting and nut gathering station, like so many other sandplain sites in Southwestern Ontario. Many such localities appear to have been occupied repeatedly on a seasonal basis by small hunting and gathering groups over a period of at least a millenium. The Parks camp, just west of Couture, was occupied regularly from Middle Woodland until Younger Phase times.

No radio-carbon dates could be obtained from the Couture site; however, ceramic evidence indicates an occupation by both Middle and Late Woodland peoples. Vessels relating to the former are distinctive in the predominance of cord marked exterior decoration, an attribute of Kent and Essex County Middle Woodland wares which seems to tie them stylistically to corded wares (Esch Phase / Western Basin Middle Woodland) reported by Stothers, Pratt and Shane (1979) for the Esch, Heckelman and Gladieux sites and ultimately to the corded utilitarian vessels typical of Ohio Hopewell (Prufert 1968). The construction, paste and decoration of Vessel 1 (Figure 4:1) suggest a fairly early Middle Woodland placement and this is supported by the Meadowood-like biface recovered from Unit 1 (see Figure 4:5). A date of 200-300 B.C. would not be amiss for Vessel 1 and perhaps the entire Middle Woodland assemblage.

The rather crude Late Woodland vessels seem to constitute a single early Late Woodland assemblage. Similarities in motif can be seen in the Rondeau Point Indian Clearing site (AbH1-4) ceramics reported to the south by Stothers (1972) and among the Period 1 wares described by Keenleyside (1978) for Point Pelee. Ceramics displaying the same decorative techniques and exterior punctates have been radiocarbon dated to the seventh century A.D. at the Neeb site on the Caradoc sand plain to the east (Fox 1982a: 21). This ware on the Couture camp would appear to relate to the as yet poorly documented Riviere Phase of the Southwestern Ontario Younger Tradition occupation.

Conclusions

Salvage excavations on the Couture campsite provided a small artifact assemblage and limited data relating to the Middle and Late Woodland culture history of the Bothwell sand plain. That the local Native groups relate most closely to cultures defined for adjacent Michigan and Ohio is no longer surprising (Fox 1982a and Spence and Fox, in press); however, this small site did much to influence the writer's perceptions of Southwestern-most Ontario Woodland prehistory. It emphasized the probable non-Iroquoian cultural affinities of the local population.

Since the 1978 Couture excavations, considerable information concerning the Late Woodland Younger Tradition occupation of Southwestern Ontario has been derived from sites such as Cherry Lane and Robson Road (Reid 1981, 1982), Bruner-Colasanti (Lennox 1982) and the Dymock villages (Fox 1982). Much still remains to be learned concerning the earliest Younger Tradition phase and the preceding Middle Woodland occupation of

Kent and Essex Counties.... sounds like some ready-made theses!

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